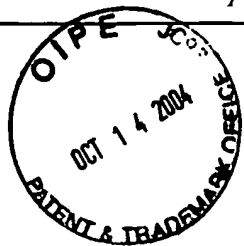


IFW

ARNOLD & PORTER LLP

202.942.5000
202.942.5999 Fax
555 Twelfth Street, NW
Washington, DC 20004-1206



October 14, 2004

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Re: U.S. Application No. 10/785,114
Filed: February 25, 2004
Title: Novel Proteins and Methods for Producing the Proteins
Applicants: Masaaki GOTO *et al.*
Atty. Docket: 16991.016

Sir:

The following documents are forwarded herewith for appropriate action by the U.S. Patent and Trademark Office (PTO):

1. an Information Disclosure Statement;
2. Form PTO-1449 (15 pages) with twenty-four (24) accompanying references; and
3. a return postcard.

Please stamp the attached postcard with the filing date of these documents and return it to our courier.

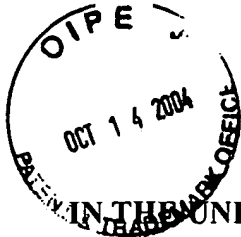
In the event that extensions of time beyond those petitioned for herewith are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned. Applicants do not believe any fees are due in conjunction with this filing. However, if any fees are required in the present application, including any fees for extensions of time, then the Commissioner is hereby authorized to charge such fees to Arnold & Porter LLP Deposit Account No. 50-2387 referencing matter number 16991.016. A duplicate copy of this letter is enclosed.

Respectfully submitted,

Rachel L. Adams

David R. Marsh (Reg. Attorney No. 41,408)
Rachel L. Adams (Reg. Attorney No. 54,660)
Kristan L. Lansbery (Reg. Agent No. 53,183)

Enclosures



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Masaaki GOTO *et al.*

Appln. No.: 10/785,114

Filed: February 25, 2004

For: Novel Proteins and Methods for
Producing the Proteins

Group Art Unit: 1646

Examiner: To be assigned

Confirmation No.: 2626

Atty. Docket: 16991.016

Information Disclosure Statement

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The attention of the Examiner is invited to the references listed on the attached Form PTO-1449.

Copies of the references listed on pages 1-2 of the attached Form PTO-1449 are submitted herewith.

Pursuant to the Official Gazette Notice of August 5, 2003 (1276 OG 55), copies of the U.S. patents and published applications listed on pages 3-5 of the attached Form PTO-1449 are not submitted herewith. Applicants note that the instant application was filed on February 25, 2004.

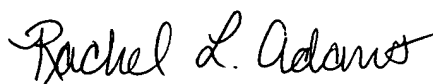
Copies of the references listed on pages 6-15 of the attached Form PTO-1449 were previously submitted in prior Application No. 10/232,858, filed September 3, 2002. Pursuant to 37 C.F.R. § 1.98(d) and MPEP § 609, the prior application is identified by its U.S. Application Number in this Information Disclosure Statement, and the above-captioned application relies on the prior application for an earlier effective filing date under 35 U.S.C. § 120.

It is respectfully requested that the information above be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

Certification and/or Fee

Because this Information Disclosure Statement is being submitted prior to issuance of the first action on the merits of the above-captioned application, no certification or fee is required.

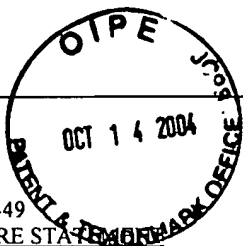
Respectfully submitted,

A handwritten signature in black ink that reads "Rachel L. Adams". The signature is written in a cursive, flowing style.

David R. Marsh (Reg. Attorney No. 41,408)
Rachel L. Adams (Reg. Attorney No. 54,660)
Kristan L. Lansbery (Reg. Agent No. 53,183)

Date: October 14, 2004

ARNOLD & PORTER LLP
555 Twelfth Street, N.W.
Washington, D.C. 20004-1206
(202) 942-5000 telephone
(202) 942-5999 facsimile



FORM PTO-1449
INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.

16991.016

APPLICATION NO.

10/785,114

APPLICANTS

Masaaki GOTO *et al.*

FILING DATE

February 25, 2004

GROUP

1646

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AA1	0 784 093 A1	07/1997	EPO			Yes No
	AB1	0 974 671 A1	01/2000	EPO			Yes No
	AC1	1 127 578 A1	08/2001	EPO			Yes No
	AD1	1 270 015 A2	01/2003	EPO			Yes No
	AE1	1 270 015 A3	02/2004	EPO			Yes No
	AF1	62-201825	09/1987	Japan			X Yes (abstract only) No
	AG1	98/46211 A1	10/1998	PCT			Yes No
	AH1	98/46644 A1	10/1998	PCT			X Yes (abstract only) No
	AI1	99/15691 A1	04/1999	PCT			X Yes (abstract only) No
	AJ1	01/44472 A1	06/2001	PCT			Yes No
	AK1	03/002713 A2	01/2003	PCT			Yes No
	AL1	03/074084 A1	09/2003	PCT			Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AM1	Jean-Jacques Body, "Current and Future Directions in Medical Therapy: Hypercalcemia," <i>CANCER Supplement</i> , 88(12):3054-3058 (2000)
	AN1	<i>Chemical Abstracts</i> , Vol. 123, No. 18, Abstract No. 237583p (1995)
	AO1	Chowdhury <i>et al.</i> , "Effects of Heparin on Osteoclast Activity," <i>Journal of Bone and Mineral Research</i> , 7(7):771-777 (1992)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>		ATTY. DOCKET NO.	APPLICATION NO.
		16991.016	10/785,114
		APPLICANTS Masaaki GOTO <i>et al.</i>	
		FILING DATE	GROUP
		February 25, 2004	1646
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			
	AA2	Cochran and Abernathy, "Modulation of Bone Resorption by Glycosaminoglycans: Effects of Parathyroid Hormone and Interleukin-1," <i>Bone</i> , 9(5):331-335 (1988)	
	AB2	Fautrel and Guillemin, "Cost of illness studies in rheumatic diseases," <i>Current Opinion in Rheumatology</i> , 14:121-126 (2002)	
	AC2	Green <i>et al.</i> , "Renal Tolerability Profile of Novel, Potent Bisphosphonates in Two Short-Term Rat Models," <i>Pharmacology & Toxicology</i> , 80:225-230 (1997)	
	AD2	Iqbal and Sobhan, "Osteoporosis: A Review," <i>Missouri Medicine</i> , 99(1):19-24 (2002)	
	AE2	Porcel <i>et al.</i> , "Anaphylaxis to calcitonin," <i>Allergologia et immunopathologia</i> , 28(4):243-245 (2000)	
	AF2	Romas <i>et al.</i> , "Involvement of Receptor Activator of NF κ B Ligand and Tumor Necrosis Factor- α in Bone Destruction in Rheumatoid Arthritis," <i>Bone</i> , 30(2):340-346 (2002)	
	AG2	Tomoyasu <i>et al.</i> , "Characterization of Monomeric and Homodimeric Forms of Osteoclastogenesis Inhibitory Factor," <i>Biochemical and Biophysical Research Communications</i> , 245(2):382-387 (1998)	
	AH2	White and Schilling, "Postmenopausal Hormone Replacement: Historical Perspectives and Current Concerns," <i>Clinical Excellence for Nurse Practitioners</i> , 4(5):277-285 (2000)	
	AI2	Yamamoto <i>et al.</i> , "Hypocalcemic Effect of Osteoclastogenesis Inhibitory Factor/Osteoprotegerin in the Thyroparathyroidectomized Rat," <i>Endocrinology</i> , 139(9):4012-4015 (1998)	
	AJ2		
	AK2		
EXAMINER			DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.			

FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>				ATTY. DOCKET NO.		APPLICATION NO.	
				16991.016		10/785,114	
				APPLICANTS			
				Masaaki GOTO <i>et al.</i>			
				FILING DATE		GROUP	
				February 25, 2004		1646	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AA3	4,179,337	12/1979	Davis <i>et al.</i>			
	AB3	4,710,473	12/1987	Morris			
	AC3	4,959,314	09/1990	Mark <i>et al.</i>			
	AD3	5,118,667	06/1992	Adams <i>et al.</i>			
	AE3	5,366,859	11/1994	Miyoshi <i>et al.</i>			
	AF3	5,374,529	12/1994	Caterson <i>et al.</i>			
	AG3	5,393,739	02/1995	Bentz <i>et al.</i>			
	AH3	5,427,954	06/1995	Sandy <i>et al.</i>			
	AI3	5,447,851	09/1995	Beutler <i>et al.</i>			
	AJ3	5,457,035	10/1995	Baum <i>et al.</i>			
	AK3	5,545,722	08/1996	Naka			
	AL3	5,578,569	11/1996	Tam			
	AM3	5,585,479	12/1996	Hoke <i>et al.</i>			
	AN3	5,599,708	02/1997	Mundy <i>et al.</i>			
	AO3	5,658,756	08/1997	Rodan <i>et al.</i>			
	AP3	5,736,506	04/1998	Naka			
	AQ3	5,830,850	11/1998	Gelb <i>et al.</i>			
	AR3	5,843,678	12/1998	Boyle			
	AS3	5,843,901	12/1998	Roeske			
	AT3	5,985,832	11/1999	Roodman <i>et al.</i>			
	AU3	6,015,938	01/2000	Boyle <i>et al.</i>			
	AV3	6,017,729	01/2000	Anderson <i>et al.</i>			
EXAMINER					DATE CONSIDERED		
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.							

FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>				ATTY. DOCKET NO.		APPLICATION NO.	
				16991.016		10/785,114	
				APPLICANTS			
				Masaaki GOTO <i>et al.</i>			
				FILING DATE		GROUP	
				February 25, 2004		1646	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AA4	6,046,033	04/2000	Goto <i>et al.</i>			
	AB4	6,087,555	07/2000	Dunstan <i>et al.</i>			
	AC4	6,242,213 B1	06/2001	Anderson			
	AD4	6,242,586 B1	06/2001	Gorman <i>et al.</i>			
	AE4	6,271,349 B1	07/2001	Dougall <i>et al.</i>			
	AF4	6,284,485 B1	09/2001	Boyle <i>et al.</i>			
	AG4	6,284,728 B1	09/2001	Boyle <i>et al.</i>			
	AH4	6,284,740 B1	09/2001	Boyle <i>et al.</i>			
	AI4	6,288,032 B1	09/2001	Boyle <i>et al.</i>			
	AJ4	6,297,022 B1	10/2001	McDonnell <i>et al.</i>			
	AK4	6,316,408 B1	11/2001	Boyle			
	AL4	6,369,027 B1	04/2002	Boyle <i>et al.</i>			
	AM4	6,419,929 B1	07/2002	Anderson			
	AN4	6,479,635 B1	11/2002	Anderson <i>et al.</i>			
	AO4	6,525,180 B1	02/2003	Gorman <i>et al.</i>			
	AP4	6,528,482 B1	03/2003	Anderson <i>et al.</i>			
	AQ4	6,537,763 B1	03/2003	Dougall <i>et al.</i>			
	AR4	6,562,948 B2	05/2003	Anderson			
	AS4	6,613,544 B1	09/2003	Boyle <i>et al.</i>			
	AT4	6,649,164 B2	11/2003	Maraskovsky			
	AU4	6,693,175 B2	02/2004	Yano <i>et al.</i>			
	AV4	6,740,522 B2	05/2004	Anderson			
EXAMINER					DATE CONSIDERED		
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.							

FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>	ATTY. DOCKET NO.	APPLICATION NO.
	16991.016	10/785,114
	APPLICANTS Masaaki GOTO <i>et al.</i>	
	FILING DATE	GROUP
	February 25, 2004	1646

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AA5	2002/0081720 A1	06/2002	Dougall <i>et al.</i>			
	AB5	2002/0086826 A1	07/2002	Anderson <i>et al.</i>			
	AC5	2002/0086827 A1	07/2002	Anderson <i>et al.</i>			
	AD5	2002/0127637 A1	09/2002	Jian <i>et al.</i>			
	AE5	2002/0150989 A1	10/2002	Greene <i>et al.</i>			
	AF5	2002/0169117 A1	11/2002	Maraskovsky			
	AG5	2003/0045456 A1	03/2003	Yamamoto <i>et al.</i>			
	AH5	2003/0100069 A1	05/2003	Jian <i>et al.</i>			
	AI5	2003/0100488 A1	05/2003	Boyle			
	AJ5	2003/0103978 A1	06/2003	Deshpande <i>et al.</i>			
	AK5	2003/0104485 A1	06/2004	Boyle			
	AL5	2003/0139325 A1	07/2003	Yamamoto <i>et al.</i>			
	AM5	2003/0144480 A1	07/2003	Gorman <i>et al.</i>			
	AN5	2003/0166097 A1	09/2003	Greene <i>et al.</i>			
	AO5	2003/0175840 A1	09/2003	Anderson <i>et al.</i>			
	AP5	2003/0176647 A1	09/2003	Yamaguchi <i>et al.</i>			
	AQ5	2003/0181418 A1	09/2003	Kumakura <i>et al.</i>			
	AR5	2003/0207827 A1	11/2003	Boyle <i>et al.</i>			
	AS5	2003/0208045 A1	11/2003	Yamaguchi <i>et al.</i>			
	AT5	2003/0216297 A1	11/2003	Kumakura <i>et al.</i>			
	AU5	2004/0033535 A1	02/2004	Boyle <i>et al.</i>			

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT				ATTY. DOCKET NO.		APPLICATION NO.	
				16991.016		10/785,114	
				APPLICANTS			
				Masaaki GOTO <i>et al.</i>			
				FILING DATE		GROUP	
				February 25, 2004		1646	
FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AA6	0514130 A2	11/1992	EPO			Yes No
	AB6	0514130 A3	11/1992	EPO			Yes No
	AC6	0526905 A2	02/1993	EPO			Yes No
	AD6	0526905 A3	02/1993	EPO			Yes No
	AE6	0727211 A1	08/1996	EPO			Yes No
	AF6	0874045 A1	10/1998	EPO			Yes No
	AG6	0911342 A1	04/1999	EPO			Yes No
	AH6	330400	05/1999	New Zealand			Yes No
	AI6	86/00922 A1	02/1986	PCT			Yes No
	AJ6	90/14363 A1	11/1990	PCT			Yes No
	AK6	93/12227 A1	06/1993	PCT			Yes No
	AL6	93/21946 A1	11/1993	PCT			Yes No
	AM6	95/11308 A1	04/1995	PCT			Yes No
	AN6	96/28546 A1	09/1996	PCT			Yes No
	AO6	97/00317 A1	01/1997	PCT			Yes No
	AP6	97/00318 A1	01/1997	PCT			Yes No
	AQ6	97/23614 A1	07/1997	PCT			Yes No
	AR6	98/07840 A1	02/1998	PCT			Abstract X only Yes No
	AS6	98/25958 A2	06/1998	PCT			Yes No
	AT6	98/28424 A2	07/1998	PCT			Yes No
	AU6	98/28426 A2	07/1998	PCT			Yes No
EXAMINER					DATE CONSIDERED		
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.							

FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>				ATTY. DOCKET NO.		APPLICATION NO.	
				16991.016		10/785,114	
				APPLICANTS			
				Masaaki GOTO <i>et al.</i>			
				FILING DATE		GROUP	
				February 25, 2004		1646	
FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AA7	98/46751 A1	10/1998	PCT			Yes No
	AB7	98/49305 A1	11/1998	PCT			Yes No
	AC7	99/19468 A1	04/1999	PCT			Yes No
	AD7	99/53942 A1	10/1999	PCT			Yes No
	AE7	99/58674 A2	11/1999	PCT			Yes No
	AF7	99/58674 A3	11/1999	PCT			Yes No
	AG7	01/03719 A2	01/2001	PCT			Yes No
	AH7	01/03719 A3	01/2001	PCT			Yes No
	AI7	01/17543 A2	03/2001	PCT			Yes No
	AJ7	01/17543 A3	03/2001	PCT			Yes No
	AK7	01/18203 A1	03/2001	PCT			Yes No
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)							
	AL	7	Adams <i>et al.</i> , "Complementary DNA Sequencing: Expressed Sequence Tags and Human Genome Project", <i>Science</i> , 252:1651-1656 (1991)				
	AM	7	Anderson <i>et al.</i> , "A homologue of the TNF receptor and its ligand enhance T-cell growth and dendritic-cell function", <i>Nature</i> , 390:175-179 (1997)				
	AN	7	Banks <i>et al.</i> , "Effect of degenerative spinal and aortic calcification on bone density measurements in post-menopausal women: links between osteoporosis and cardiovascular disease?", <i>European Journal of Clinical Investigation</i> , 24(12):813-817 (1994)				
	AO	7	Banner <i>et al.</i> , "Crystal Structure of the Soluble Human 55 kd TNF Receptor-Human TNF β Complex: Implications for TNF Receptor Activation", <i>Cell</i> , 73(3):431-445 (1993)				
	AP	7	Bennett, C. F., "Antisense Research", <i>Science</i> , 271:434 (1996)				
	AQ	7	Beutler and Cerami, "Tumor Necrosis, Cachexia, Shock, and Inflammation: a Common Mediator", <i>Annual Review of Biochemistry</i> , 57:505-518 (1988)				
EXAMINER					DATE CONSIDERED		
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.							

FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>			ATTY. DOCKET NO.	APPLICATION NO.
			16991.016	10/785,114
			APPLICANTS	
			Masaaki GOTO <i>et al.</i>	
			FILING DATE	GROUP
			February 25, 2004	1646
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)				
	AA	8	Beutler and van Huffer, "Unraveling Function in the TNF Ligand and Receptor Families", <i>Science</i> , 264:667-668 (1994)	
	AB	8	Boyce <i>et al.</i> , "Effects of Interleukin-1 on Bone Turnover in Normal Mice", <i>Endocrinology</i> , 125(3):1142-1150 (1989)	
	AC	8	Bradley and Robertson, "Embryo-Derived Stem Cells: a Tool for Elucidating the Developmental Genetics of the Mouse", <i>Current Topics in Developmental Biology</i> , 20:357-371 (1986)	
	AD	8	Brinster <i>et al.</i> , "Factors affecting the efficiency of introducing foreign DNA into mice by microinjecting eggs", <i>Proceedings of the National Academy of Sciences of USA</i> , 82:4438-4442 (1985)	
	AE	8	Bucay <i>et al.</i> , "osteoprotegerin-deficient mice develop early onset osteoporosis and arterial calcification", <i>Genes and Development</i> , 12(9):1260-1268 (1998)	
	AF	8	Capon <i>et al.</i> , "Designing CD4 immunoadhesins for AIDS therapy", <i>Nature</i> , 337(6207):525-531 (1989)	
	AG	8	Cappecchi, M. R., "Altering the Genome by Homologous Recombination", <i>Science</i> , 244:1288-1292 (1989)	
	AH	8	Chambers <i>et al.</i> , "Generation of osteoclast-inductive and osteoclastogenic cell lines from the <i>H-2K^btsA58</i> transgenic mouse", <i>Proceedings of the National Academy of Sciences of USA</i> , 90:5578-5582 (1993)	
	AI	8	Charreau <i>et al.</i> , "Transgenesis in rats: technical aspects and models", <i>Transgenic Research</i> , 5(4):223-234 (1996)	
	AJ	8	Chen <i>et al.</i> , "Mapping the Domain(s) Critical for the Binding of Human Tumor Necrosis Factor- α to Its Two Receptors", <i>Journal of Biological Chemistry</i> , 270(6):2874-2878 (1995)	
	AK	8	Chenu <i>et al.</i> , "Transforming growth factor β inhibits formation of osteoclast-like cells in long-term human marrow cells", <i>Proceedings of the National Academy of Sciences of USA</i> , 85(15):5683-5687 (1988)	
	AL	8	Chomczynski and Sacchi, "Single-Step Method of RNA Isolation by Acid Guanidinium Thiocyanate-Phenol-Chloroform Extraction", <i>Analytical Biochemistry</i> , 162(1):156-159 (1987)	
	AM	8	Culver and Blaese, "Gene therapy for cancer", <i>Trends in Genetics</i> , 10(5):174-178 (1994)	
EXAMINER				DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.				
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)				

FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>			ATTY. DOCKET NO.	APPLICATION NO.
			16991.016	10/785,114
			APPLICANTS Masaaki GOTO <i>et al.</i>	
			FILING DATE	GROUP
			February 25, 2004	1646
	AA	9	Database EMBL16, EMBL Database Accession No. AA170348	
	AB	9	Database GenEMBL, EMBL Accession No. AF019048	
	AC	9	Database EMROD, EMBL Database Accession No. M59378	
	AD	9	DeClerck <i>et al.</i> , "Inhibition of Autoproteolytic Activation of Interstitial Procollagenase by Recombinant Metalloproteinase Inhibitor MI/TIMP-2", <i>Journal of Biological Chemistry</i> , 266(6):3893-3899 (1991)	
	AE	9	Demer, L. L., "A Skeleton in the Atherosclerosis Closet", <i>Circulation</i> , 92(8):2029-2032 (1995)	
	AF	9	Ebi <i>et al.</i> , "Mechanism of Mast Cell Deficiency in Mutant Mice of <i>mi/mi</i> Genotype: An Analysis by Co-Culture of Mast Cells and Fibroblasts", <i>Blood</i> , 75(6):1247-1251 (1990)	
	AG	9	Efrat, S., "Prospects for gene therapy of insulin-dependent diabetes mellitus", <i>Diabetologia</i> , 41(12):1401-1409 (1998)	
	AH	9	Ellison <i>et al.</i> , "The nucleotide sequence of a human immunoglobulin C _γ 1 gene", <i>Nucleic Acids Research</i> , 10(13):4071-4079 (1982)	
	AI	9	Engels and Uhlmann, "Gene Synthesis", <i>Angew. Chem. Int. Ed. Engl.</i> , 28:716-734 (1989)	
	AJ	9	Fawthrop <i>et al.</i> , "The Effect of Transforming Growth Factor β on the Plasminogen Activator Activity of Normal Human Osteoblast-like Cells and a Human Osteosarcoma Cell Line MG-63", <i>Journal of Bone and Mineral Research</i> , 7(12):1363-1371 (1992)	
	AK	9	Fenton <i>et al.</i> , "Long-Term Culture of Disaggregated Rat Osteoclasts: Inhibition of Bone Resorption and Reduction of Osteoclast-Like Cell Number by Calcitonin and PTHrP[107-139]", <i>Journal of Cellular Physiology</i> , 155:1-7 (1993)	
	AL	9	Fisher <i>et al.</i> , "Dominant Interfering Fas Gene Mutations Impair Apoptosis in a Human Autoimmune Lymphoproliferative Syndrome", <i>Cell</i> , 81(6):935-946 (1995)	
	AM	9	Galli-Taliadoros <i>et al.</i> , "Gene knock-out technology: a methodological overview for the interested novice", <i>Journal of Immunological Methods</i> , 181(1):1-15 (1995)	
	AN	9	George <i>et al.</i> , "Current Methods in Sequence Comparison and Analysis", <i>Macromolecular Sequencing and Synthesis Selected Methods and Applications</i> , pp. 127-149 (1988)	
EXAMINER				DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.				

FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>			ATTY. DOCKET NO.	APPLICATION NO.
			16991.016	10/785,114
			APPLICANTS Masaaki GOTO <i>et al.</i>	
			FILING DATE	GROUP
			February 25, 2004	1646
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)				
	AA	10	Goeddel, D. V., "Systems for Heterologous Gene Expression", <i>Methods in Enzymology</i> , 185:3-7 (1990)	
	AB	10	Goeddel <i>et al.</i> , "Tumor Necrosis Factors: Gene Structure and Biological Activities", <i>Cold Spring Harbor Symposia on Quantitative Biology, Volume LI</i> , pp. 597-609 (1986)	
	AC	10	Goodwin <i>et al.</i> , "Molecular Cloning and Expression of the Type 1 and Type 2 Murine Receptors for Tumor Necrosis Factor", <i>Molecular and Cellular Biology</i> , 11(6):3020-3026 (1991)	
	AD	10	Gowen <i>et al.</i> , "Preferential Inhibition of Cytokine-Stimulated Bone Resorption by Recombinant Interferon Gamma", <i>Journal of Bone and Mineral Research</i> , 1(5):469-474 (1986)	
	AE	10	Graves and Jilka, "Comparison of Bone and Parathyroid Hormone as Stimulators of Osteoclast Development and Activity in Calvarial Cell Cultures From Normal and Osteopetrotic (mi/mi) Mice", <i>Journal of Cellular Physiology</i> , 145(1):102-109 (1990)	
	AF	10	Gribskov <i>et al.</i> , "Profile analysis: Detection of distantly related proteins", <i>Proceedings of the National Academy of Sciences of USA</i> , 84(13):4355-4358 (1987)	
	AG	10	Grigoriadis <i>et al.</i> , "c-Fos: A Key Regulator of Osteoclast-Macrophage Lineage Determination and Bone Remodeling", <i>Science</i> , 266:443-448 (1994)	
	AH	10	Hattersley <i>et al.</i> , "Human Macrophage Colony-Stimulating Factor Inhibits Bone Resorption by Osteoclasts Disaggregated From Rat Bone", <i>Journal of Cellular Physiology</i> , 137(1):199-203 (1988)	
	AI	10	Hodgson <i>et al.</i> , "Advances in vector systems for gene therapy", <i>Exp. Opin. Ther. Patents</i> , 5(5):459-468 (1995)	
	AJ	10	International Search Report, International Application No. PCT/JP96/00374 (1996)	
	AK	10	International Search Report, International Application No. PCT/JP98/01728 (1998)	
	AL	10	Isozaki <i>et al.</i> , "Cell Type-Specific Deficiency of c-kit Gene Expression in Mutant Mice of <i>mi/mi</i> Genotype", <i>American Journal of Pathology</i> , 145(4):827-836 (1994)	
	AM	10	Jimi <i>et al.</i> , "Osteoclast function is activated by osteoblastic cells through a mechanism involving cell-to-cell contact", <i>Endocrinology</i> , 137(5):2187-2190 (1996)	
	AN	10	Johnson <i>et al.</i> , "Pleiotropic Effects of a Null Mutation in the c-fos Proto-Oncogene", <i>Cell</i> , 71(4):577-586 (1992)	
EXAMINER				DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.				

FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>			ATTY. DOCKET NO.	APPLICATION NO.
			16991.016	10/785,114
			APPLICANTS Masaaki GOTO <i>et al.</i>	
			FILING DATE	GROUP
			February 25, 2004	1646
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)				
	AA	11	Kaji <i>et al.</i> , "Insulin-Like Growth Factor-I Mediates Osteoclast-Like Cell Formation Stimulated by Parathyroid Hormone", <i>Journal of Cellular Physiology</i> , 172(1):55-62 (1997)	
	AB	11	Karaplis, A. C., "Gene Targeting", <i>Principles of Bone Biology</i> , pp. 1189-1201, Academic Press (1996)	
	AC	11	Kasono <i>et al.</i> , "Inhibitory effect of interleukin-4 on osteoclast-like cell formation in mouse bone marrow culture, <i>Bone and Mineral</i> , 21(3):179-188 (1993)	
	AD	11	Kohn <i>et al.</i> , "A second tumor necrosis factor receptor gene product can shed a naturally occurring tumor necrosis factor inhibitor", <i>Proceedings of the National Academy of Sciences of USA</i> , 87(21):8331-8335 (1990)	
	AE	11	Kraulis, P. J., "MOLSCRIPT: a program to produce both detailed and schematic plots of protein structures", <i>Journal of Applied Crystallography</i> , 24(5):946-950 (1991)	
	AF	11	Kukita <i>et al.</i> , "Osteoinductive factor inhibits formation of human osteoclast-like cells", <i>Proceedings of the National Academy of Sciences of USA</i> , 87:3023-3026 (1990)	
	AG	11	Lacey <i>et al.</i> , "Interleukin 4, Interferon- γ , and Prostaglandin E Impact the Osteoclastic Cell-Forming Potential of Murine Bone Marrow Macrophages", <i>Endocrinology</i> , 136(6):2367-2376 (1995)	
	AH	11	Levine and Williams, "Automated measurement of mouse apolipoprotein B: convenient screening tool for mouse models of atherosclerosis", <i>Clinical Chemistry</i> , 43(4):669-674 (1997)	
	AI	11	Lewis <i>et al.</i> , "Cloning and expression of cDNAs for two distinct murine tumor necrosis factor receptors demonstrate one receptor is species specific", <i>Proceedings of the National Academy of Sciences of USA</i> , 88:2830-2834 (1991)	
	AJ	11	Loetscher <i>et al.</i> , "Tumor Necrosis Factor: Receptors and Inhibitors", <i>Cancer Cells</i> , 3(6):221-226 (1991)	
	AK	11	Lowe <i>et al.</i> , "Osteopetrosis in Src-deficient mice is due to an autonomous defect of osteoclasts" <i>Proceedings of the National Academy of Sciences of USA</i> , 90(10):4485-4489 (1993)	
	AL	11	Lüthy <i>et al.</i> , "Improving the sensitivity of the sequence profile method", <i>Protein Science</i> , 3(1):139-146 (1994)	
	AM	11	MacDonald <i>et al.</i> , "Isolation of RNA Using Guanidinium Salts", <i>Methods in Enzymology</i> , 152:219-227 (1987)	
EXAMINER				DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.				

FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>			ATTY. DOCKET NO.	APPLICATION NO.
			16991.016	10/785,114
			APPLICANTS Masaaki GOTO <i>et al.</i>	
			FILING DATE	GROUP
			February 25, 2004	1646
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)				
	AA	12	Maitland and McDougal, "Biochemical Transformation of Mouse Cells by Fragments of Herpes Simplex Virus DNA", <i>Cell</i> , 11(1):233-241 (1977)	
	AB	12	Marks, Jr., and Lane, "Osteopetrosis, a New Recessive Skeletal Mutation on Chromosome 12 of the Mouse", <i>Journal of Heredity</i> , 67(1):11-18 (1976)	
	AC	12	Marshall, E., "Gene Therapy's Growing Pains", <i>Science</i> , 269:1050-1055 (1995)	
	AD	12	Martin <i>et al.</i> , "Interleukins in the Control of Osteoclast Differentiation", <i>Critical ReviewsTM in Eukaryotic Gene Expression</i> , 8(2):107-23 (1998)	
	AE	12	Matsudaira, P., "Sequence from Picomole Quantities of Proteins Electrophoretically Blotted onto Polyvinylidene Difluoride Membranes", <i>Journal of Biological Chemistry</i> , 262(21):10035-10038 (1987)	
	AF	12	Miller and Vile, "Targeted vectors for gene therapy", <i>FASEB Journal</i> , 9(2):190-199 (1995)	
	AG	12	Miller and Vile, "Gene Transfer and Antisense Nucleic Acid Techniques", <i>Parasitology Today</i> , 10(3):92-97 (1994)	
	AH	12	Milligan <i>et al.</i> , "Current Concepts in Antisense Drug Design", <i>Journal of Medicinal Chemistry</i> , 36(14):1923-1937 (1993)	
	AI	12	Mizuno <i>et al.</i> , "Severe Osteoporosis in Mice Lacking Osteoclastogenesis Inhibitory Factor/Osteoprotegerin", <i>Biochemical and Biophysical Research Communications</i> , 247(3):610-615 (1998)	
	AJ	12	Montgomery <i>et al.</i> , "Herpes Simplex Virus-1 Entry into Cells Mediated by a Novel Member of the TNF/NGF Receptor Family", <i>Cell</i> , 87(3):427-436 (1996)	
	AK	12	Morony <i>et al.</i> , "A Chimeric Form of Osteoprotegerin Inhibits Hypercalcemia and Bone Resorption Induced by IL-1 β , TNF- α , PTH, PTHrP, and 1,25(OH) $_2$ D $_3$ ", <i>Journal of Bone and Mineral Research</i> , 14(9):1478-1485 (1999)	
	AL	12	Mundy <i>et al.</i> , "The Effects of Cytokines and Growth Factors on Osteoblastic Cells", <i>Bone</i> , 17(2 Suppl):71S-75S (1995)	
	AM	12	Nagata and Golstein, "The Fas Death Factor", <i>Science</i> , 267:1449-1456 (1995)	
EXAMINER				DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.				

FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT			ATTY. DOCKET NO.	APPLICATION NO.	
			16991.016	10/785,114	
			APPLICANTS		
			Masaaki GOTO <i>et al.</i>		
			FILING DATE	GROUP	
			February 25, 2004	1646	
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)					
	AA	13	Ogden and Adams, "Electrophoresis in Agarose and Acrylamide Gels", <i>Methods in Enzymology</i> , 152:61-87 (1987)		
	AB	13	Parhami and Demer, "Arterial calcification in face of osteoporosis in ageing: can we blame oxidized lipids", <i>Current Opinion in Lipidology</i> , 8(5):312-314 (1997)		
	AC	13	Pearson, W. R., "Rapid and Sensitive Sequence Comparison with FASTP and FASTA", <i>Methods in Enzymology</i> , 183:63-98 (1990)		
	AD	13	Perigaud <i>et al.</i> , "Nucleoside analogues as chemotherapeutic agents: a review", <i>Nucleosides & Nucleotides</i> , 11(2-4):903-945 (1992)		
	AE	13	Reddi, A. H., "Bone Morphogenesis and Modeling: Soluble Signals Sculpt Osteosomes in the Solid State", <i>Cell</i> , 89:159-161 (1997)		
	AF	13	Rieger <i>et al.</i> , <i>Glossary of Genetics and Cytogenetics</i> , p. 17, Springer-Verlag, Berlin Heidelberg, New York (1976)		
	AG	13	Rojanasakul, Y., "Antisense oligonucleotide therapeutics: drug delivery and targeting", <i>Advanced Drug Delivery Reviews</i> , 18:115-131 (1996)		
	AH	13	Roodman, G. D., "Role of Cytokines in the Regulation of Bone Resorption", <i>Calcified Tissue International</i> , 53(Suppl. 1):S94-S98 (1993)		
	AI	13	Rosati <i>et al.</i> , "Normal long bone growth and development in type X collagen-null mice", <i>Nature Genetics</i> , 8(2):129-135 (1994)		
	AJ	13	Schinke <i>et al.</i> , "Molecular determinants of arterial calcification", <i>Annals of Medicine</i> , 30(6):538-541 (1998)		
	AK	13	Shahinian <i>et al.</i> , "Differential T Cell Costimulatory Requirements in CD28-Deficient Mice", <i>Science</i> , 261:609-612 (1993)		
	AL	13	Siddhanti <i>et al.</i> , "Molecular to Pharmacologic Control of Osteoblast Proliferation and Differentiation", <i>Journal of Cellular Biochemistry</i> , 55(3):310-320 (1994)		
	AM	13	Simonet <i>et al.</i> , "Long-term Impaired Neutrophil Migration in Mice Overexpressing Human Interleukin-8", <i>Journal of Clinical Investigation</i> , 94(3):1310-1319 (1994)		
EXAMINER				DATE CONSIDERED	
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.					

FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>			ATTY. DOCKET NO.	APPLICATION NO.
			16991.016	10/785,114
			APPLICANTS Masaaki GOTO <i>et al.</i>	
			FILING DATE	GROUP
			February 25, 2004	1646
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)				
	AA	14	Simonet <i>et al.</i> , "Osteoprotegerin: A Novel Secreted Protein Involved in the Regulation of Bone Density", <i>Cell</i> , 89:309-319 (1997)	
	AB	14	Smith <i>et al.</i> , "The TNF Receptor Superfamily of Cellular and Viral Proteins: Activation, Costimulation, and Death", <i>Cell</i> , 76:959-962 (1994)	
	AC	14	Soriano <i>et al.</i> , "Targeted Disruption of the c-src Proto-Oncogene Leads to Osteopetrosis in Mice", <i>Cell</i> , 64(4):693-702 (1991)	
	AD	14	Stein and Cheng, "Antisense Oligonucleotides as Therapeutic Agents - Is the Bullet Really Magical?", <i>Science</i> , 261:1004-1012 (1993)	
	AE	14	Stull and Szoka, Jr., "Antigene, Ribozyme and Aptamer Nucleic Acid Drugs: Progress and Prospects", <i>Pharmaceutical Research</i> , 12(4):465-483 (1995)	
	AF	14	Suda <i>et al.</i> , "Modulation of Osteoclast Differentiation by Local Factors", <i>Bone</i> , 17(2 Suppl):87S-91S (1995)	
	AG	14	Suda <i>et al.</i> , "Molecular Cloning and Expression of the Fas Ligand, a Novel Member of the Tumor Necrosis Factor Family", <i>Cell</i> , 75(6):1169-1178 (1993)	
	AH	14	Takada <i>et al.</i> , "A simple method to assess osteoclast-mediated bone resorption using unfractionated bone cells", <i>Bone and Mineral</i> , 17:347-359 (1992)	
	AI	14	Tsuda <i>et al.</i> , "Isolation of a Novel Cytokine from Human Fibroblasts That Specifically Inhibits Osteoclastogenesis", <i>Biochemical and Biophysical Research Communications</i> , 234(1):137-142 (1997)	
	AJ	14	Udagawa <i>et al.</i> , "The Bone Marrow-Derived Stromal Cell Lines MC3T3-G2/PA6 and ST2 Support Osteoclast-Like Cell Differentiation in Cocultures with Mouse Spleen Cells", <i>Endocrinology</i> , 125(3):1805-1813 (1989)	
	AK	14	Udagawa <i>et al.</i> , "Origin of osteoclasts: Mature monocytes and macrophages are capable of differentiating into osteoclasts under a suitable microenvironment prepared by bone marrow-derived stromal cells", <i>Proceedings of the National Academy of Sciences of USA</i> , 87(18):7260-7264 (1990)	
	AL	14	Wagner, R. W., "Gene inhibition using antisense oligodeoxynucleotides", <i>Nature</i> , 372(6504):333-335 (1994)	
	AM	14	Wang, "Bone and haematopoietic defects in mice lacking c-fos", <i>Nature</i> , 360(6406):741-745 (1992)	
EXAMINER				DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.				

FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>			ATTY. DOCKET NO.	APPLICATION NO.
			16991.016	10/785,114
			APPLICANTS	
			Masaaki GOTO <i>et al.</i>	
			FILING DATE	GROUP
			February 25, 2004	1646
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)				
	AA	15	Watanabe <i>et al.</i> , "Interleukin-4 as a Potent Inhibitor of Bone Resorption", <i>Biochemical and Biophysical Research Communications</i> , 172(3):1035-1041 (1990)	
	AB	15	Westermann <i>et al.</i> , "Inhibition of expression of SV40 virus large T-antigen by antisense oligodeoxyribonucleotides" <i>Biomedica Biochimica Acta</i> , 48(1):85-93 (1989)	
	AC	15	Wiktor-Jedrzejczak <i>et al.</i> , "Hematological Characterization of Congenital Osteopetrosis in <i>op/op</i> Mouse (Possible Mechanism for Abnormal Macrophage Differentiation)", <i>Journal of Experimental Medicine</i> , 156(5):1516-1527 (1982)	
	AD	15	Wiktor-Jedrzejczak <i>et al.</i> , "Total absence of colony-stimulating factor 1 in the macrophage-deficient osteopetrotic (<i>op/op</i>) mouse", <i>Proceedings of the National Academy of Sciences of USA</i> , 87(12):4828-4832 (1990)	
	AE	15	Wiley <i>et al.</i> , "Identification and Characterization of a New Member of the TNF Family that Induces Apoptosis", <i>Immunity</i> , 3(6):673-682 (1995)	
	AF	15	Wong <i>et al.</i> , "TRANCE Is a Novel Ligand of the Tumor Necrosis Factor Receptor Family That Activates c-Jun N-terminal Kinase in T Cells", <i>Journal of Biological Chemistry</i> , 272(40):25190-25194 (1997)	
	AG	15	Wu-Pong, S., "Oligonucleotides: Opportunities for Drug Therapy and Research", <i>Pharmaceutical Technology</i> , 118:102-114 (1994)	
	AH	15	Yamaguchi <i>et al.</i> , "Characterization of Structural Domains of Human Osteoclastogenesis Inhibitory Factor", <i>Journal of Biological Chemistry</i> , 273(9):5117-5123 (1998)	
	AI	15	Yan and Chao, "Disruption of Cysteine-rich Repeats of the p75 Nerve Growth Factor Receptor Leads to Loss of Ligand Binding", <i>Journal of Biological Chemistry</i> , 266(18):12099-12104 (1991)	
	AJ	15	Yang <i>et al.</i> , "Eradication of Established Tumors by a Fully Human Monoclonal Antibody to the Epidermal Growth Factor Receptor without Concomitant Chemotherapy", <i>Cancer Research</i> , 59(6):1236-1243 (1999)	
	AK	15	Yasuda <i>et al.</i> , "Osteoclast differentiation factor is a ligand for osteoprotegerin/ osteoclastogenesis-inhibitory factor and is identical to TRANCE/RANKL", <i>Proceedings of the National Academy of Sciences of USA</i> , 95(7):3597-3602 (1998)	
	AL	15	Yoneda <i>et al.</i> , "Sumarin Suppresses Hypercalcemia and Osteoclastic Bone Resorption in Nude Mice Bearing a Human Squamous Cancer", <i>Cancer Research</i> , 55:1989-1993 (1995)	
	AM	15	Yoshida <i>et al.</i> , "The murine mutation osteopetrosis is in the coding region of the macrophage colony stimulating factor gene", <i>Nature</i> , 345(6274):442-444 (1990)	
EXAMINER				DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.				